Western Longleaf Pine Savannah

Rarity Rank: Acidic - S1S2/G2G3; Saline - S1/G1
Synonyms: Open Savannah, Pine Flatwoods, Coastal Meadow, Pine Meadow, Pine Barren
Ecological Systems: CES203.191 West Gulf Coastal Plain Wet Longleaf Pine Savannah and Flatwoods

***General Description*:**

- Floristically rich, herb-dominated wetlands
- Sparsely stocked with *Pinus palustris* (longleaf pine) as the dominant tree species
- Occupy the poorly drained and seasonally saturated/flooded depressional areas and low flats, while non-wetland flatwoods occupy the better drained slight rises, low ridges and “pimple mounds” (only WGCP)
- Subject to a highly fluctuating water table, from surface saturation/shallow flooding in late fall/ winter/early spring to growing-season droughtiness.
- Soils are hydric, very strongly acidic, nutrient poor, fine sandy loams and silt loams, low in organic matter
- There is a western Louisiana variant on saline soil (Brimstone silt loam)
- Soils may be underlain by an impeding layer so that they are only slowly permeable and water runs off the surface gradually
- Fire maintained natural community (frequent fires prevent woody encroachment and maintain herbaceous layer)

Plant Community Associates

Common woody species include:

Pinus palustris (longleaf pine),
Nyssa sylvatica (black gum),
Q. marilandica (blackjack oak),
Morella spp. (wax myrtles),
Styrax americana (littleleaf snowbell)
Magnolia virginiana (sweet bay),
Quercus virginiana (live oak),
Q. laurifolia (laurel oak),
Hypericum spp. (St. John's worts),

Common herbaceous species include:

Andropogon spp. (broomsedges),
S. tenerum (slender bluestem),
Aristida spp. (three-awn grasses),
Muhlenbergia expansa (hairawn muhly),
Coelorachis spp. (jointgrasses),
Xyris spp. (yellow-eyed grasses),
Scleria spp. (nut-rushes),
Eriocaulon spp. (pipeworts),
Schizachyrium scoparium (little bluestem)
Panicum spp. (panic grasses)
Ctenium aromaticum (toothache grass),
Erianthus spp. (plume-grasses),
Rhynchospora spp. (beak-rushes),
Fuirena spp. (umbrella grasses),
Dichromena latifolia (white top sedge),
Lachnocaulon spp. (bog buttons),

Fimbristylis spp. (fimbry-sedge)

Common forb (wildflower) species include:

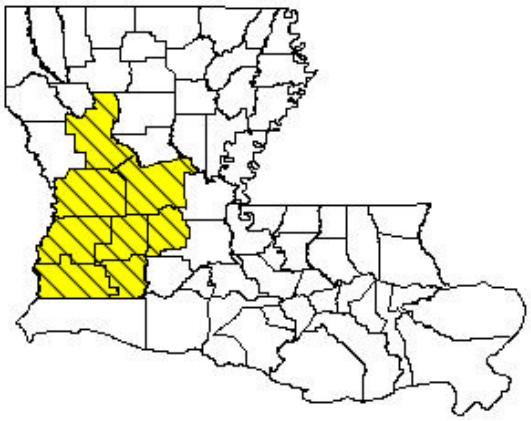
Agalinis spp. (gerardias),
Rhexia spp. (meadow beauties),
Oxypolis filiformis (hog-fennel),
Liatris spp. (blazing-stars),
Drosera spp. (sundews),
Marshallia tenuifolia (Barbara's-buttons),
Platanthera spp. (fringed-orchids),
sunflower family (Asteraceae),
Lobelia spp. (lobelias),
Eryngium integrifolium (bog thistle),
Polygala spp. (milkworts),
Sabatia spp. (rose-gentians),
Pinguicula spp. (butterworts),
Utricularia spp. (bladderworts),
lily family (Liliaceae),
orchid family (Orchidaceae)

Federally-listed plant & animal species:

Schwalbea americana (American chaffseed)	Endangered; G2; S1
Picoides borealis (red-cockaded woodpecker)	Endangered; G2; S2

Range:

Lower West Gulf Coastal Plain ecoregion in the southwest and west central portions of the state.



Threats & Management Considerations:

Western longleaf flatwoods savannahs provide critical habitat for many animal and plant species. This longleaf pine habitat type has been reduced by an alarming 95 to 99% of it's original extent. Activities causing direct impacts or destruction of savannahs include construction of roads, pipelines or utilities, conversion to slash or loblolly pine plantations, and residential or commercial development. Habitat degradation or disturbance is caused by maintenance of exiting roads, pipelines and utilities, physical damage from timber harvesting and planting activities, hydrological alterations (to include adjacent areas), contamination by chemicals (herbicides, fertilizers), and off-road vehicle use. Alteration of natural community composition and structure occurs with fire exclusion or inappropriate fire regime, use of chemical herbicides or fertilizers, and introduction of invasive or exotic species.

Use of appropriate management activities and developing a compatible management plan prevents destruction or degradation of this habitat type and promotes long-term maintenance of healthy longleaf savannahs. Such management strategies should include:

- Use of growing season prescribed fire (April-June) at a frequency of every 1 to 3 years
- No logging during wet periods when the soil is saturated
- Replanting with longleaf seedlings only
- Thinning targeting loblolly and slash pines for removal and favoring longleaf pine as "leave" trees
- No bedding, plowed fire lines or other soil disturbance that may alter natural water flow patterns
- Preventing conversion of existing natural forests to other land uses